

Clinical Pediatrics 2019: Foreign body aspiration: An important cause of medley acute and chronic respiratory symptoms in children and its management by flexible bronchoscopy-Sarabon Tahura-Dhaka Shishu Hospital

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Introduction: Foreign body (FB) aspiration in airway is a common occurrence in pediatric age group, need prompt recognition and management. However, it is not always diagnosed (especially in radiolucent FB) due to non-specific symptoms of varying severity. Often the symptoms are subtle and mistaken for other more common conditions like pneumonia and asthma and do not respond as expected to standard therapy and present a diagnostic challenge. Rigid bronchoscopy still remains the gold standard in Bangladesh to remove airway FBs.

As indicated by the National Safety Council, in 2016 the pace of deadly gagging in American youngsters <5 years old in everyone was 0.43 per 100,000. Be that as it may, a past report breaking down non-deadly gagging information of kids younger than 14 has uncovered a similarly higher pace of 20.4 per 100,000 populace. 55.2% of these non-lethal stifling cases in youngsters <4 years old included sweets, with sausages and nuts being bound to require hospitalization. Guys represented 55.4% of cases yet there was no factually huge distinction between the genders. Examination of the national pattern of inorganic remote body desire has uncovered that suctioned coins have diminished in relative recurrence with suctioned gems on the other hand getting progressively basic in the United States. By and large the pace of yearning from outside bodies bringing about crisis office visits has stayed stable between the long stretches of 2001 and 2014.

An ongoing meta-investigation of the overall writing on outside body goal uncovered a sex disparity with 60% of patients being guys. Nuts apparently were causative in 40% of cases in high-pay and low-center pay countries. Among inorganic outside bodies, a pooled extent among the writing originating from high-pay nations uncovered that magnets were causative in 34% of the cases. Determination was deferred by over 24 hours in 60% of those specific cases.

Little youngsters are especially in danger for remote body desire. One investigation has demonstrated the mean age to be two years with 98% of cases including kids < 5 old enough. As aviation route opposition is contrarily identified with the cross sectional span by an intensity of four, the moderately littler breadth of pediatric aviation routes implies that they are progressively inclined to huge wind current obstacle with even little remote bodies. Dental advancement likewise adds to the danger of outside body goal, as molars ordinarily are absent before the age of 2; subsequently kids in this age bunch can nibble bits of food with their incisors yet not adequately ready to crush food into littler pieces. Furthermore, little youngsters

will in general investigate the world with their mouths while playing and show significant levels of movement and distractibility while eating, further putting them in danger. Because of the relative anatomical narrowing of the tracheobronchial tree in kids, the proximal aviation route is regularly the site of impediment. Truth be told, in one review audit, 96% of remote bodies suctioned were found in this area. In youngsters <15 years old, remote bodies stop inside the left lung nearly as frequently as in the correct lung. This is because of the symmetric tracheal take-off point found between the two bronchi in numerous kids preceding the improvement of an unmistakable aortic indent influencing the trachea and left primary bronchus. Notwithstanding age, on the off chance that there is observable aortic space on the trachea while inspecting radiographs, at that point the privilege bronchial edge will be less particular contrasted with the left side and goal will be increasingly basic in the correct lung

Aim: The main aim of this study was to emphasize the importance of considering airway foreign body as a cause of acute and chronic respiratory symptoms in children and to outline the clinical evidences of the utility and feasibility of flexible bronchoscopy for management of airway FB in children.

Methods: This prospective study was performed on children (aged six months to 16 year) having acute or recurrent or long standing, non-resolving or partially resolving respiratory complaints who underwent flexible bronchoscopy for suspected FB from July 2018 to July 2019 in a tertiary care hospital in Bangladesh. History, clinical, radiological, bronchoscopic findings and immediate effect after bronchoscopy were analyzed.

Results: The results indicated that among total 32 children, only 25% (n=8) had definite history of FB aspiration. The most frequent symptom was paroxysmal cough (72.7%) followed by wheezing, stridor and recurrent and persistent pneumonia. FB was found in 47% (n=15) children and removed successfully by Dormia basket in nine children, four by rat-tooth forceps and two by cryo probe. The most common (n=8) FB was peanut. Others are pin, metallic clip, plastic bead of Tasbih, filament of pencil torch light, custard apple seed, pea pulse, plastic safety ware joint. Thick mucus plugs were found in four children. Respiratory symptoms improved after removal of foreign bodies in all cases. Respiratory symptoms improved after removal of foreign bodies in all cases. During procedure, transient hypoxia developed in three children which were alleviated by temporary cessation of the procedure.

Conclusions: The possibility of foreign body aspiration should be considered in any child who present with acute or persistent and recurrent respiratory symptoms. And flexible bronchoscopy

documented a crucial diagnostic and safe therapeutic tool for foreign body management in pediatric age group.